

Message

From: Goodis, Michael [Goodis.Michael@epa.gov]
Sent: 4/17/2020 11:01:17 AM
To: Aubee, Catherine [Aubee.Catherine@epa.gov]
Subject: FW: PFAS

Sigh...this is a quagmire.

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Gaines, Linda <Gaines.Linda@epa.gov>
Sent: Thursday, April 16, 2020 6:25 PM
To: Aubee, Catherine <Aubee.Catherine@epa.gov>
Cc: Goodis, Michael <Goodis.Michael@epa.gov>; Syed, Hamaad <Syed.Hamaad@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: RE: PFAS

Catherine,

First, thank you for this detailed information. I am slowly working my way through it.

Second, can you clarify for me what OPPIN is? Is this an internal database that is not publicly available? I can find a few references to it via Google, but many come back to EPA's Substance Registry Service, which really just has it as a list of chemicals.

Third, can I cite the information in the spreadsheet as personal communication? Most of the stuff you sent me, I can now cite a FR or eCFR. However, for example, with 1,2-Dichloro-1,1,1,2,2-tetrafluoroethane, all the databases provide no information, but your information that "CAS# returns both an active ingredient (PC 326200) and an inert ingredient (PC 876421) that is no longer allowed" is very helpful. I am going to edit the information I have in my paper to incorporate all this information, and I am happy to send that paragraph back to you to review.

To respond to some of your questions and concerns, the reason I am tagging these as PFAS is that they fit the structural definition used in EPA's Chemistry Dashboard for that particular list (https://comptox.epa.gov/dashboard/chemical_lists/PFASSTRUCT), which uses the definition of RCF2CFR'R" (R cannot be H). I personally don't consider all the chemicals that fit this definition to be PFAS, but there was a couple of cross-agency calls when this list was being created as to what is and is not a PFAS. I was trying to do an objective search, and this seems to be the best list to use for that. Also, it should be noted that Congress has used several different definitions of PFAS in legislation, and some of their definitions are even more vague than this definition. In the 2019 NDAA, there are at least four different definitions of PFAS, and in section 332, it says "the term "PFAS" means perfluoroalkyl and polyfluoroalkyl substances that are man-made chemicals with at least one fully fluorinated carbon atom."

I appreciate the extra sources of PPLS and PDMS. I had actually used PDMS before. The issue with that one is that it is on a Purdue server, and it is not clear anywhere that it represents "official" EPA information. Also PPLS and PDMS both have the same issue that has frustrated me in that they for the most part lack historical information. As I work in Superfund, historical information is important to me. The information you have provided to me about registration cancellations is very helpful. The databases that simply say no active products or inactive, are not as helpful. The

information in ChemSearch is more helpful for that context, or better said, it could be more helpful if it was complete and up to date. The FR notices are of course, very helpful. It is simply a matter how to track them down without needing someone like you to very helpfully track them down.

Finally, your note about the last two chemicals in the spreadsheet with regards to the CASRN, Antony Williams says they get CASRN from a variety of different sources, and the confidence level on the different chemicals is provided. Also I has asked him previously, and he said CASRN, Names and matching PC-Codes was provided by Robert Schulz and Jim Carleton for the pesticide list that I used in the Dashboard. The chemical identified as 1433216-71-7 has PC-655557, and the last one 1-Acetyl-6-(1,1,1,2,3,3,3-heptafluoro-2-propenyl)-3-[[2,6-(14C2)-3-pyridinylmethyl]amino]-3,4-dihydro-2(1H)-quinazolinone (DTXSID00920532) has PC-655556. I should have provided those before.

Again, thank you for the information. I am going to update my information. I will let you know if I have any more questions. If you are willing, I will also send the rewritten paragraph back to you, so it can be checked for accuracy.

Linda G.T. Gaines, Ph.D., P.E., BCEE
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From: Aubee, Catherine <Aubee.Catherine@epa.gov>
Sent: Wednesday, April 15, 2020 8:27 AM
To: Gaines, Linda <Gaines.Linda@epa.gov>
Cc: Goodis, Michael <Goodis.Michael@epa.gov>; Syed, Hamaad <Syed.Hamaad@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: Re: PFAS

Hi Linda,

I was looped in on your inquiry. RD queried OPPIN (the Office of Pesticide Programs Information Network, our system for tracking all pesticide applications and registrations) and crosswalked this with other public sources of information, like the Federal Register. Information on the registration status of the eight chemicals you identified in your narrative is in the attached spreadsheet.

We are interested in the specific source(s) of information you are using to tag these as PFAS chemicals. Although they are fluorinated, we do not consider any of the currently (or pending) registered pesticide active ingredients to be PFAS and have some concerns about confusion that may result from them being characterized as such.

You mentioned ChemSearch as one source of information. As noted, this dashboard pulls information from numerous sources and we cannot confirm that they are necessarily up-to-date. So, it can be a useful tool for exploration but may best be used as a jumping off point to locate primary sources for follow-up. You may wish to bookmark the links to PPLS <<https://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>> and PDMS <https://cfpub.epa.gov/si/si_public_record_Report.cfm?Lab=&dirEntryID=2893>; those sources are publicly available and kept up to date for registered products and study citation data.

Please let me know if you'd like to discuss anything further. I am cc'ing Hamaad Syed, our Deputy Director for information management (ITRMD), in case you'd like to connect for more information on the ChemSearch tool, specifically.

Best,
Catherine
Associate Director (Acting)

OPP Registration Division
US Environmental Protection Agency

Contact:

Aubee.catherine@epa.gov

Mobile: 571.317.4402

From: Gaines, Linda <Gaines.Linda@epa.gov>
Sent: Friday, April 03, 2020 11:28 AM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: RE: PFAS

I understand what you are saying about the database, and it is clear that it is not updated well as Li-PFOS has not been registered since 2002, so an 18 year lag time to update is pretty darn bad. (no offense) There is also no warning on the website that it is not kept up to date. However in terms of public transparency, how can a member of the public find out the status of pesticides? Federal Registers are not exactly easy to search and read for that matter. Is there a good database where a member of the public can easily find information on chemicals used as pesticides?

Below is what I have written.

Eight compounds were common to both lists. The identifiers were then confirmed in EPA's Pesticide Chemical Search. {EPA, #568} N-Ethylperfluorooctanesulfonamide (EtFOSA, sulfluramid, 4151-50-2) is an insecticide whose registration was cancelled in May 2008. It was first registered in 1987. (EPA 2007) Lithium perfluorosulfonate (CASRN 29457-72-5) is a registered pesticide and was first registered in 2001. (EPA) Per personal communication, the last product was cancelled in 2002, but the Pesticide Chemical Search does not reflect that. Flubendiamide (272451-65-7) is a PFAS that was registered in 2008. Pyriproxyfen (337458-27-2) is a PFAS that was registered in 2013. 1,2-Dichloro-1,1,1,2,2-tetrafluoroethane (76-14-2) is chlorofluorocarbon that is in the Pesticide Chemical Search with no registration information. Broflanilide (1207727-04-5), 6-[1,2,2,2-Tetrafluoro-1-(trifluoromethyl)ethyl]-2,4(1H,3H)-quinazolin-1-one (1433216-71-7), and 1-Acetyl-6-(1,1,1,2,3,3,3-heptafluoro-2-propenyl)-3-[[2,6-(1,3,5-triazin-2-yl)methyl]amino]-3,4-dihydro-2(1H)-quinazolin-1-one (DTXSID00920532) were not found in the Pesticide Chemical Search, and it is unclear why they are in the Chemistry Dashboard's pesticide list. (EPA)

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From: Goodis, Michael <Goodis.Michael@epa.gov>
Sent: Friday, April 03, 2020 10:55 AM
To: Gaines, Linda <Gaines.Linda@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: RE: PFAS

Thank you Linda

Yes, please send us the list of compounds that you identified and we will double check them and get back to you. I would mention that the fist data base that you referred to is not regularly updated and may not be the best source for this information, but again we will confirm. You bring up a good point and we may need to reconsider the public availability of this data base.

Michael L. Goodis, P.E.
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From: Gaines, Linda <Gaines.Linda@epa.gov>
Sent: Friday, April 03, 2020 9:10 AM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: RE: PFAS

I took Michele off this email because she has enough email to deal with, and I just got off the phone with her, so she knows I am following up.

I would appreciate any help you can provide. First, as far as I can tell, the official EPA public pesticide database is <https://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1>. If there is another public database that you can point me to, I would be happy to have that information. However, this database either needs to be taken down, or it needs to be updated. If you put in the CASRN for LiPFOS in it, it is still listed as registered.

Second, I have been working on a PFAS usage document based on public literature (scientific articles, books, patents, etc.). On the subject of pesticides, I went to EPA's Chemistry Dashboard (<https://comptox.epa.gov/dashboard>). There are something like 20 different PFAS lists, but I pulled the PFAS structures list. Recognize that there are numerous definitions of PFAS, but that seemed to be the most reasonable to use for my purposes. [My document has MANY, MANY disclaimers.] I compared that list to two other lists in the Dashboard "PESTICIDES|EPA: List of Active Ingredients UPDATED 10/25/2019" and "PESTICIDES|EPA: List of Inert Ingredients Food and Nonfood Use UPDATED 10/25/2019." I will have to dig through my notes as to who at EPA I followed up with about these lists. Antony Williams who is in charge of the Dashboard gave me the names of the people who submitted the information for those two lists. There were no matches between the inert list and the PFAS structures list. However, there were several matches between the active list and the PFAS list. All the active pesticides, I went back to the above mentioned EPA pesticide database to compare and confirm. There were several problems of compounds not being in that database. There were also a few that I found in the database.

I am happy to send you list of compounds that match that I either did or did not find in the database. When you say there are no pesticides with PFAS, it would be good to confirm if the issue is the database, or if the issue is the definition of PFAS.

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From: Goodis, Michael <Goodis.Michael@epa.gov>
Sent: Friday, April 03, 2020 8:49 AM

To: Burgess, Michele <Burgess.Michele@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>; Gaines, Linda <Gaines.Linda@epa.gov>
Subject: RE: PFAS

Hi Linda

Can you please share with us the pesticide information that does not appear to be accurate and for which products if you have these details?

Michael L. Goodis, P.E.
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From: Burgess, Michele <Burgess.Michele@epa.gov>
Sent: Friday, April 03, 2020 8:33 AM
To: Henry, Tala <Henry.Tala@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>; Gaines, Linda <Gaines.Linda@epa.gov>
Subject: RE: PFAS

Good morning,
Please connect with Linda Gaines (Superfund PFAS expert) with the information. According to Linda the registration database does not reflect the correct information.
Thank you so much for your help and information.

Hope all is well!!

Michele Burgess, PhD
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From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Friday, April 3, 2020 8:29 AM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Burgess, Michele <Burgess.Michele@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: FW: PFAS

Mike/Rick,

In response to the recent email that was circulating in OLEM about LPOS still being a registered pesticide, I responded back to that group with the info Rick provided on its cancellation.

In response to that email, Michele Burgess (cc'd) reached out to me for more info. I told her what you had provided me in February...email below.

OLEM is currently working on a "PFAS use paper", so Michele thought it would be important to have the latest/greatest from you all...

Hence, this email...Michele, Mike Goodis in OPP is who I was talking about that provided the info below. I refer you to him or his designee for more info on PFASs in pesticides (or lack thereof as the case is)

Tala R. Henry, Ph.D.
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From: Goodis, Michael <Goodis.Michael@epa.gov>
Sent: Tuesday, February 18, 2020 5:29 PM
To: Keigwin, Richard <Keigwin.Richard@epa.gov>; Henry, Tala <Henry.Tala@epa.gov>
Subject: RE: PFAS

We checked our OPPIN database and confirmed there no currently registered active ingredients that are PFAS. (Sulfluramid, an insecticide that is a PFAS, was previously registered but the last of the sulfluramid pesticide product registrations were canceled in 2013.)

Also there are no inert ingredients in any currently registered pesticide product that are PFAS.

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From: Keigwin, Richard <Keigwin.Richard@epa.gov>
Sent: Tuesday, February 18, 2020 10:53 AM
To: Henry, Tala <Henry.Tala@epa.gov>
Cc: Goodis, Michael <Goodis.Michael@epa.gov>
Subject: RE: PFAS

I believe the answer is no. The Registration Division can confirm. CC'ing Mike Goodis.

From: Henry, Tala <Henry.Tala@epa.gov>
Sent: Tuesday, February 18, 2020 10:53 AM
To: Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: PFAS
Importance: High

Do you know if any AIs are PFAS?
Any Inerts?
Are they on TSCA Inv also?

Who should I work with on this in your shop?

Tala R. Henry, Ph.D.
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U.S. Environmental Protection Agency

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